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Ananthura rigida, n. sp., a New Deep-Sea Isopod from Suruga Bay, Japan*

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駿河湾から発見された深海性甲殼類 Ananthura 属の一新種

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- 1. 駿河湾の1,000mの深海底から採集されたウミナナフシを、新種 Ananthura rigida (和名, カタウミナナフシ)として記載した. これは、日本近海における本属の最初の記録である.
- 2. 本種は Ananthura 属の他種から, 尾肢の形, 頭部前端の形, 第1胸節の前節に剛毛の少ないこと 及び体長が23ミリにも達することから区別される.

In Febrary 1976, an expedition cruise (KT-76-3) was carried out in Suruga and Sagami Bay, central Japan, by the R/V Tansei Maru of Ocean Research Institute, University of Tokyo, under the research project "Ecological and taxonomical survey of benthic community of Surga Bay and Sagami Bay", and a rich biological collection was obtained together with ecological observations. In this collection was included a big specimen of an anthurid isopod which was later sent to me for identification through the kindness of Dr. Masatsune Takeda of the National Science Museum, Tokyo. At closer examinations, it has proved to represent a new species of the genus Ananthura, the genus hitherto unrecorded from Japan or the entire Pacific. The specimen, preserved in alcohol, was dissected and examined in glycerol. All the figures were drawn by using camera lucida.

Before going further, I wish to express my sincere gratitude to Dr. Saburo Nishimura of the Seto Marine Biological Laboratory, Kyoto University, for reading the manuscript and Dr. Masatsune Takeda of the National Science Museum, Tokyo, for giving me a chance to study such an interesting specimen.

Ananthura rigida, n. sp.

(Japanese name: Kata-uminanafushi) (Text-figures 1 and 2)

Material examined: 1º (holotype, 23.0 mm in body length). Type specimen is deposited at the National Science Museum, Tokyo (NSMT-Cr-5457).

Locality and Date: Suruga Bay; lat. 34°55.6′N, long. 138°40.3′E —— lat. 34°55.3′N, long. 138°40.3′E; depth 1008–1050m; Fed. 28, 1976, during the cruise KT-76-3 of the R/V Tansei Maru.

^{*} Contributions from the Osaka Museum of Natural History, No. 197.

Description: Body, white in alcohol, slender and about 14 times as long as wide except both antennae. Body surface pretty rigid. Anterolateral angles of cephalon extending beyond the rostral projection. Eye lacking. Relative length of peraeonal somites about 6:6:6:9:9:6:4. Peraeonal somites without dorsal pit. Demarcation of pleonal somites visible in dorsal and lateral views; first to fourth somites similar in length; fifth somite somewhat longer than the fourth; sixth somite with deep median cleft at posterior border. Endopod of uropod extended beyond telson.

First antenna composed of 10 segments; first segment biggest and oblong; sixth to tenth segments each with aesthetascs on distal margin. Second antenna longer than

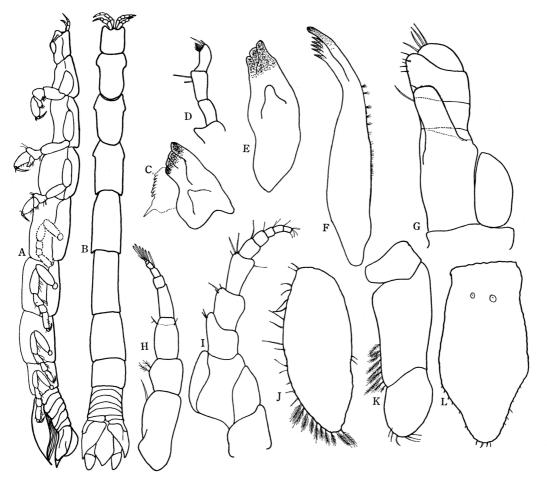


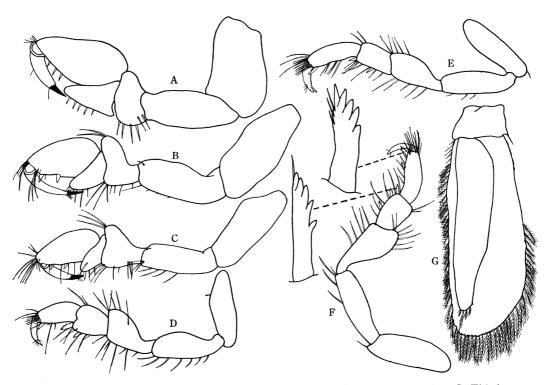
Fig. 1. Ananthura rigida, n. sp. A. Lateral view. B. Dorsal view. C. Right mandible.
D. Mandibular palp of right mandible. E. Left mandible. F. First maxilla.
G. Maxilliped. H. First antenna. I. Second antenna. J. Exopod of uropod.
K. Endopod of uropod. L. Telson.

the first; second segment grooved and still bigger than the other segments; several terminal segments of both sides seem to be broken in this specimen.

Right mandible with stout incisive process bearing four teeth; a thin flange with about seven teeth; molar process seems to be a small knob; mandibular palp three-segmented and terminal segment with eight setae at the tip. Incisive process of left mandible stout bearing three teeth; no thin flange was recognized on left mandible of the specimen. First maxilla with a stouter tooth and six smaller acute teeth at apical part. Maxilliped with four free segments and an inner plate.

Peraeopods I-III subequall in size and stouter than remaining pairs; carpal process acute; inner margin of propodus of peraeopods II-III with two stout setae; inner margin of propodus of peraeopod I with three setae. Peraeopods IV-VII similar in shape and size; basis and ischium oblong; merus nearly triangular; carpus roughly rectangular with two or three serrated stout setae and not underriding the next segment; propodus not so elongated as carpus and with one or two stout setae.

Pleopods without any characteristic features, as usually so in female anthurids.



Ananthura rigida, n. sp. A. First peraeopod. B. Second peraeopod. C. Third peraeopod. D. Fifth peraeopod. E. Seventh peraeopod. F. Sixth peraeopod G. First pleopod.

Endopod of uropod with a round terminal segment and rectangular basal segment. Exopod of uropod egg-shaped and with somewhat sinuate margin. Telson almost triangular in apical part and with a pair of small statocysts at basal part.

Remarks: The present new species is most closely allied to Ananthura abyssorum (Norman and Stebbing) from the North Atlantic, but differs from this in the following features: (1) shape of telson, (2) bigger size, (3) shape of anterior part of cephalon, and (4) less numerous setae on propodus of peraeopod I.

REFERNCES

- Barnard, K. H. 1914. Contributions to the crustacean fauna of South Africa 3. Additions to the marine Isopoda, with notes on some previously incompletely known species. Ann. South Afr. Mus., 10: 325a-442.
- Menzies, R. J. 1962. The Isopods of Abyssal Depths in the Atlantic Ocean. *In* "Abyssal Crustacea", Colombia Univ. Press. Vema Research series, 1: 79–206.
- Norman, A. M. & T. R. R. Stebbing. 1886. On the Crustacea Isopoda of the "Lightening", "Porcupine" and "Valorous" Expeditions. Trans. zool. Soc. Lond., 12 (4): 77-141, Pls. XVI-XXVII.
- Richardson, H. E. 1902. The marine and terrestrial Isopods of the Bermudas, with descriptions of new genera and species. Trans. Conn. Acad. Sci., 11: 277-310. Pls. XXXVII-XL.
- 1905. A monograph on the isopods of North America. Bull. U. S. nat. Mus. no. 54, 727 pp.
- Schultz, G. A. 1969. How to know the Marine Isopod Crustaceans. Wm C. Brown Company Publishers, Hampton, 359 pp.